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Taxonomic paper

Nematodes from terrestrial and freshwater habitats in the Arctic

Oleksandr Holovachov †

† Swedish Museum of Natural History, Department of Zoology, Stockholm, Sweden

Corresponding author: Oleksandr Holovachov (oleksandr.holovachov@nrm.se)

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Abstract

We present an updated list of terrestrial and freshwater nematodes from all regions of the Arctic, for which records of properly identified nematode species are available: Svalbard, Jan Mayen, Iceland, Greenland, Nunavut, Northwest territories, Alaska, Lena River estuary, Taymyr and Severnaya Zemlya and Novaya Zemlya. The list includes 391 species belonging to 146 genera, 54 families and 10 orders of the phylum Nematoda.

Keywords

Alaska, Arctic, distribution, fauna, freshwater, Greenland, Iceland, Jan Mayen, Lena River, Northwest territories, Novaya Zemlya, Nunavut, Severnaya Zemlya, Svalbard, Taymyr, terrestrial.

Introduction

Nematodes are one of the most numerous and abundant multicellular organisms on the planet in general and in the Arctic in particular. There are over 70 research papers published which include data on the fauna and distribution of nematodes in the region. Few faunistic overviews of the Arctic nematodes exist in the literature. The "Catalogue of free-

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living soil and fresh-water nematodes of Arctic and Subarctic" (Kuzmin and Gagarin 1990) includes a large number of subarctic nematodes and is normally inaccessible. Subsequent publication by Gagarin (2001b) focuses only on the fresh-water nematodes from the Russian Arctic and Subarctic, while Coulson and Refseth (2004) give a list of terrestrial and freshwater nematodes from Svalbard and Jan Mayen. The present paper aims to provide a comprehensive overview of all findings of nematodes in the entire Arctic region between the years of 1883 and 2013, with all species names adjusted according to the most recent classification and nomenclature.

Materials and methods

The species list has been compiled based on literature data and refers to the area of the Arctic (Fig. 1) as defined by the Circumpolar Arctic Vegetation Map (CAVM Team 2003) and Meltofte et al. (2013). The list below includes all species found in the Arctic, and specifies the regions where each species was found, as well as all relevant references. Current taxonomic status and systematic position of all species was updated according to the most recent views on nematode systematics. Section on nomenclature includes those synonymous names, and sometimes mistyped names, which were used in the original publications on the Arctic nematodes; it does not include any other existing synonyms or combinations. Asterisks indicate those new species names, which were originally proposed based on populations described from the Arctic.

Figure 1.

Known localities in the Arctic for which detailed information about nematode fauna (identified to species level) is available in the literature.

Taxa identified in the literature to the genus level only were not considered in the review for the following reasons: 1) It is impossible to make sure how many actual species were considered by the author – just one, or if s/he had treated multiple species together in the same unit. 2) Taxa identified only to the genus level have limited usefulness when

analyzing distribution, endemism and other aspects of biogeography. Nematode systematics is continuously improving. Menzel (1920) described *Dorylaimus* sp. from Spitzbergen (Svalbard). The context of the genus *Dorylaimus* had changed considerably since 1920 and now includes members of at least families Dorylaimidae, Qudsianematidae, Aporcelaimidae and Nordiidae, making it practically impossible to use Menzel's record in modern faunistic studies. Even genus-level identifications done more recently face similar problems. Species that are now considered to belong to the same genus may in future, when more data becomes available, be split into different, sometimes distantly related genera. It would thus be impossible to know in the future what author of the paper meant when he identified his material.

General classification and classification of the orders Chromadorida, Desmodorida and Araeolaimida follows De Ley and Blaxter (2004) and Holovachov and Esquivel (2012). Classification of the order Enoplida follows that of Smol et al. (2014) and Andrássy (2002); Triplonchida – Holovachov and Shoshin (2014); Dorylaimida – Andrássy (2009); Mononchida – Ahmad and Jairajpuri (2010); Monhysterida – Fonseca and Decraemer (2008); Plectida – Holovachov (2014); Rhabditida – Holovachov et al. (2009), Geraert (2008), Geraert (2011), Sudhaus (2011), Sudhaus and Fürst von Lieven (2003).

Updated list of nematode species found in the Arctic

Phylum Nematoda

Order ENOPLIDA

Family Ironidae

Ironus tenuicaudatus de Man, 1876

Notes: Taymyr and Severnaya Zemlya, Russia (Gagarin 1990, Gagarin 1993, Gagarin 1996, Gagarin 2001b, Gagarin 2001a, Kuzmin and Gagarin 1990).

Family Alaimidae

Alaimus arcuatus Thorne, 1939

Notes: Svalbard (Loof 1971); Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Alaimus depressus Loof, 1971*

Notes: Svalbard (Loof 1971).

Alaimus parvus Thorne, 1939

Notes: Svalbard (Loof 1971).

Alaimus primitivus de Man, 1880

Notes: Jan Mayen (Allgén 1953); Taymyr and Severnaya Zemlya, Russia (Gagarin 1990, Gagarin 2001b, Gagarin 2001a, Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Steiner 1916b).

Alaimus proximus Thorne, 1939

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin 1986, Kuzmin and Gagarin 1990).

Alaimus similis Thorne, 1939

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Cosalaimus striatus (Loof, 1964)

Nomenclature:

Alaimus striatus Loof, 1964

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin 1986, Kuzmin and Gagarin 1990).

Amphidelus elegans (de Man, 1921)

Nomenclature:

Alaimus elegans de Man, 1921

Notes: Jan Mayen (Allgén 1953); Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Paramphidelus dolichurus (de Man, 1876)

Nomenclature:

Amphidelus dolichurus (de Man, 1876)

Notes: Svalbard (Loof 1971); Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Paramphidelus paludicola Gagarin, 1991*

Notes: Taymyr and Severnaya Zemlya, Russia (Gagarin 1990, Gagarin 1991b, Gagarin 1993, Gagarin 2001b, Gagarin 2001a).

Paramphidelus paramonovi (Eliashvili, 1971)

Notes: Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 2001b).

Paramphidelus pusillus (Thorne, 1939)

Nomenclature:

Amphidelus pusillus Thorne, 1939

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Family Rhabdolaimidae

Rhabdolaimus terrestris de Man, 1880

Notes: Svalbard (Loof 1971); Nunavut, Canada (Mulvey 1969c); Taymyr and Severnaya Zemlya, Russia (Kuzmin 1976, Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 2001b).

Family Trefusiidae

Tripylina arenicola (de Man, 1880)

Nomenclature:

Trischistoma arenicola (de Man, 1880)

Notes: Nunavut, Canada (Mulvey 1969c).

Trischistoma monohystera (de Man, 1880)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Order TRIPLONCHIDA

Family Tobrilidae

Tobrilus aberrans (W. Schneider, 1925)

Notes: Northwest territories, Canada (Ebsary 1982).

Tobrilus affinis Gagarin, 1996*

Notes: Taymyr and Severnaya Zemlya, Russia (Gagarin 1996, Gagarin 2001b).

Tobrilus brevisetosus (W. Schneider, 1925)

Notes: Taymyr and Severnaya Zemlya, Russia (Gagarin 2001b); Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 2001b).

Tobrilus gracilis (Bastian, 1865)

Notes: Nunavut, Canada (Mulvey 1969c); Lena River estuary, Russia (Gagarin 2001b); Taymyr and Severnaya Zemlya, Russia (Gagarin 1990, Gagarin 1996, Gagarin 2001b, Gagarin 2001a, Gagarin and Kuzmin 1983, Kuzmin 1972, Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 1999a, Gagarin 2001b).

Tobrilus helveticus (Hofmänner in Hofmänner & Menzel, 1914)

Nomenclature:

Trilobus pseudallophysis Micoletzky 1925

Notes: Greenland (Ditlevsen 1927); Taymyr and Severnaya Zemlya, Russia (Gagarin 1996, Kuzmin and Gagarin 1990).

Tobrilus modestus Gagarin, 1996*

Notes: Taymyr and Severnaya Zemlya, Russia (Gagarin 1996, Gagarin 2001b).

Tobrilus parvus Gagarin, 1991*

Notes: Taymyr and Severnaya Zemlya, Russia (Gagarin 1990, Gagarin 1991a, Gagarin 1993, Gagarin 2001b, Gagarin 2001a).

Tobrilus tripylis Gagarin, 1991*

Notes: Taymyr and Severnaya Zemlya, Russia (Gagarin 1990, Gagarin 1991a, Gagarin 1993, Gagarin 2001b, Gagarin 2001a).

Brevitobrilus stefanskii (Micoletzky, 1925)

Notes: Lena River estuary, Russia (Gagarin 2001b); Taymyr and Severnaya Zemlya, Russia (Gagarin 1990, Gagarin 1996, Gagarin 2001b, Gagarin 2001a, Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Gagarin 1999a, Gagarin 2001b).

Epitobrilus allophysis (Steiner, 1919)

Notes: Taymyr and Severnaya Zemlya, Russia (Gagarin 1996, Gagarin 2001b); Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 2001b).

Eutobrilus affectiosus Shoshin, 1988

Nomenclature:

Eutobrilus antarcticus sensu Gagarin, 1993, 2001; *Raritobrilus antarcticus* sensu Gagarin 1990, 1991

Notes: Taymyr and Severnaya Zemlya, Russia (Gagarin 1990, Gagarin 1991a, Gagarin 1993, Gagarin 2001b, Gagarin 2001a, Gagarin 2009).

Eutobrilus altherri (Andrássy, 1953)

Notes: Taymyr and Severnaya Zemlya, Russia (Gagarin 1996, Gagarin 2001b).

Eutobrilus andrassyi (Altherr, 1963)

Notes: Taymyr and Severnaya Zemlya, Russia (Gagarin 2009, Kuzmin and Gagarin 1990).

Eutobrilus grandipapillatus (Brakenhoff, 1914)

Notes: Lena River estuary, Russia (Gagarin 2001b); Taymyr and Severnaya Zemlya, Russia (Gagarin 1996, Gagarin 2001b); Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 1999a, Gagarin 2001b).

Eutobrilus selengaensis (Tsalolikhin, 1977)

Notes: Taymyr and Severnaya Zemlya, Russia (Gagarin 1996, Gagarin 2001b).

Neotobrilus longus (Leidy, 1852)

Notes: Lena River estuary, Russia (Gagarin 2001b); Taymyr and Severnaya Zemlya, Russia (Gagarin 1996, Kuzmin and Gagarin 1990).

Paratrilobus grandipapilloides Micoletzky, 1922

Notes: Taymyr and Severnaya Zemlya, Russia (Gagarin 1990, Gagarin 1993, Gagarin 2001b, Gagarin 2001a).

Paratrilobus rapis Gagarin, 1991*

Notes: Taymyr and Severnaya Zemlya, Russia (Gagarin 1990, Gagarin 1991a, Gagarin 1993, Gagarin 2001b, Gagarin 2001a).

Peritobrilus arcticus (Gagarin, 1991)

Nomenclature:

Eutobrilus arcticus Gagarin, 1991*

Notes: Taymyr and Severnaya Zemlya, Russia (Gagarin 1990, Gagarin 1991a, Gagarin 1993, Gagarin 2001b, Gagarin 2001a).

Peritobrilus vipriensis Gagarin, 1999*

Notes: Lena River estuary, Russia (Gagarin 1999b, Gagarin 2001b).

Quasibrilus strenuus (Gagarin, 1991)

Nomenclature:

Eutobrilus strenuus Gagarin, 1991*

Notes: Taymyr and Severnaya Zemlya, Russia (Gagarin 1990, Gagarin 1991a, Gagarin 1993, Gagarin 2001b, Gagarin 2001a).

Raritobrilus steineri (Micoletzky, 1925)

Nomenclature:

Eutobrilus steineri (Micoletzky, 1925); *Tobrilus steineri* Micoletzky, 1925

Notes: Lena River estuary, Russia (Gagarin 2001b); Taymyr and Severnaya Zemlya, Russia (Gagarin 1990, Gagarin 1993, Gagarin 1996, Gagarin 2001b, Gagarin 2001a, Kuzmin 1986, Kuzmin and Gagarin 1990).

Semitobrilus ebsaryi Tsalolikhin, 2000*

Nomenclature:

Tobrilus longicaudatus sensu Ebsary, 1982

Notes: Northwest territories, Canada (Ebsary 1982).

Semitobrilus longicaudatus (Schneider, 1923)

Nomenclature:

Tobrilus longicaudatus (Schneider, 1923)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin 1972, Kuzmin and Gagarin 1990).

Semitobrilus parapellucidus (Ebsary, 1982)

Nomenclature:

Tobrilus parapellucidus Ebsary, 1982*

Notes: Northwest territories, Canada (Ebsary 1982); Taymyr and Severnaya Zemlya, Russia (Gagarin 1990, Gagarin 1993, Gagarin 2001b, Gagarin 2001a).

Semitobrilus gagarini (Ebsary, 1982)

Notes: Lena River estuary, Russia (Gagarin 2001b).

Family Tripylidae

Tripyla affinis de Man, 1880

Notes: Nunavut, Canada (Mulvey 1969c); Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Steiner 1916b).

Tripyla dubia Gagarin, 1997*

Notes: Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 2001b).

Tripyla filicaudata de Man, 1880

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin 1986, Kuzmin and Gagarin 1990).

Tripyla glomerans Bastian, 1865

Nomenclature:

Tripyla papillata Bütschli, 1873

Notes: Svalbard (Loof 1971); Greenland (Ditlevsen 1927); Taymyr and Severnaya Zemlya, Russia (Gagarin 1996, Kuzmin 1972, Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 1999a, Gagarin 2001b).

Tripyla infia Brzeski & Winiszewska-Slipinska, 1993

Nomenclature:

Tripyla filipjevi Altherr in Altherr & Delamare Deboutteville, 1972

Notes: Svalbard (Janiec 1997); Taymyr and Severnaya Zemlya, Russia (Gagarin 1990, Gagarin 1993, Gagarin 1996, Gagarin 2001b, Gagarin 2001a).

Tripyla magna Altherr in Altherr & Delamare Deboutteville, 1972

Notes: Lena River estuary, Russia (Gagarin 2001b); Taymyr and Severnaya Zemlya, Russia (Gagarin 1990, Gagarin 1993, Gagarin 1996, Gagarin 2001b, Gagarin 2001a).

Tripyla setifera Bütschli, 1873

Notes: Lena River estuary, Russia (Gagarin 2001b); Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Family Prismatolaimidae

Prismatolaimus dolichurus de Man, 1880

Notes: Svalbard (Loof 1971); Jan Mayen (Allgén 1953); Greenland (Ditlevsen 1927); Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Steiner 1916b).

Prismatolaimus intermedius (Bütschli, 1873)

Notes: Svalbard (Loof 1971); Jan Mayen (Allgén 1953); Nunavut, Canada (Mulvey 1969c); Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Prismatolaimus primitivus Loof, 1971*

Notes: Svalbard (Loof 1971).

Prismatolaimus stenolaimoides Loof, 1971*

Notes: Svalbard (Loof 1971).

Prismatolaimus tareya Gagarin & Kuzmin, 1972*

Notes: Taymyr and Severnaya Zemlya, Russia (Gagarin 1993, Gagarin and Kuzmin 1972, Kuzmin 1976, Kuzmin and Gagarin 1990).

Prismatolaimus verrucosus Hirschmann, 1952

Notes: Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 2001b).

Family Bastianiidae

Bastiania gracilis de Man, 1876

Notes: Svalbard (Loof 1971); Nunavut, Canada (Mulvey 1969c); Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Steiner 1916b).

Bastiania parexilis De Coninck, 1935

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Family Odontolaimidae

Odontolaimus chlorurus de Man, 1880

Notes: Svalbard (Loof 1971); Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Family Diphtherophoridae

Diphtherophora communis de Man, 1880

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Diphtherophora minuta Ivanova, 1958

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Diphtherophora obesa Thorne, 1939

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Diphtherophora perplexans (Cobb, 1913)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Tylolaimophorus bulgaricus (Andrássy, 1958)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Tylolaimophorus cylindricus (Cobb, 1920)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Family Trichodoridae

Trichodorus californicus Allen, 1957

Notes: Alaska (Bernard 1992).

Trichodorus carlingi Bernard, 1992*

Notes: Alaska (Bernard 1992).

Order DORYLAIMIDA

Family Nygolaimidae

Paravulvus hartingii (de Man, 1880)

Notes: Taymyr and Severnaya Zemlya, Russia (Gagarin 1990, Gagarin 1996, Gagarin 2001b, Gagarin 2001a).

Clavicaudoides clavicaudatus (Altherr, 1953)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Solididens vulgaris (Thorne, 1930)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Family Dorylaimidae

Calcaridorylaimus arcticus Gagarin, 1997*

Notes: Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 2001b).

Calcaridorylaimus promissus Andrássy, 1986

Notes: Alaska (Andrássy 2003c).

Chrysodorus filiformis (Bastian, 1865)

Nomenclature:

Dorylaimus filiformis Bastian, 1865

Notes: Greenland (Allgén 1954).

Crocodorylaimus biserovi Gagarin, 1996*

Notes: Taymyr and Severnaya Zemlya, Russia (Gagarin 2001b).

Crocodorylaimus flavomaculatus (Linstow, 1876)

Nomenclature:

Mesodorylaimus flavomaculatus (Linstow, 1876)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Crocodorylaimus dadayi (Thorne & Swanger, 1936)

Nomenclature:

Laimydorus dadayi (Thorne & Swanger, 1936)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin 1986).

Dorylaimus lineatus Altherr in Altherr & Delamare-Deboutteville, 1972

Notes: Northwest territories, Canada (Mulvey and Anderson 1979).

Dorylaimus stagnalis Dujardin, 1845

Notes: Greenland (Ditlevsen 1927); Northwest territories, Canada (Mulvey and Anderson 1979); Lena River estuary, Russia (Gagarin 2001b); Taymyr and Severnaya Zemlya, Russia (Gagarin 1990, Gagarin 1996, Gagarin 2001b, Gagarin 2001a, Kuzmin

and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 2001b).

Laimydorus doryuris (Ditlevsen, 1911)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Laimydorus finalis Thorne, 1975

Notes: Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 2001b).

Laimydorus pseudostagnalis (Micoletzly, 1927)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 2001b).

Mesodorylaimus bastiani (Bütschli, 1873)

Nomenclature:

Dorylaimus bastiani Bütschli, 1873; *Dorylaimus langii* Cobb, 1888

Notes: Svalbard (von Linstow 1900); Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Steiner 1916b).

Mesodorylaimus japonicus (Cobb in Thorne & Swanger, 1936)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Mesodorylaimus litoralis Loof, 1969

Notes: Taymyr and Severnaya Zemlya, Russia (Gagarin 1990, Gagarin 2001b, Gagarin 2001a).

Mesodorylaimus pendschikenticus (Tulaganov, 1949)

Notes: Taymyr and Severnaya Zemlya, Russia (Gagarin 1990, Gagarin 2001b, Gagarin 2001a).

Family Actinolaimidae

Paractinolaimus macrolaimus (de Man, 1884)

Nomenclature:

Actinolaimus macrolaimus (de Man, 1884)

Notes: Greenland (Ditlevsen 1927); Alaska (Andrássy 2003c); Lena River estuary, Russia (Gagarin 2001b); Taymyr and Severnaya Zemlya, Russia (Kuzmin 1972, Kuzmin and Gagarin 1990).

Paractinolaimus longidrilus Eveleigh, 1982*

Notes: Northwest territories, Canada (Eveleigh 1982).

Westindicus cinctus (Cobb in Thorne, 1939)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Family Qudsianematidae

Arctidorylaimus arcticus Mulvey & Anderson, 1979*

Notes: Northwest territories, Canada (Mulvey and Anderson 1979).

Allodorylaimus andrassyi (Meyl, 1955)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Allodorylaimus dialematus (Cobb in Thorne & Swanger, 1936)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Allodorylaimus holdemani (Andrássy, 1959)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Allodorylaimus lindbergi (Andrássy, 1960)

Nomenclature:

Eudorylaimus lindbergi Andrássy, 1960; *Allodorylaimus rarus* Gagarin, 1999*; *Eudorylaimus curvicaudatus* Eliava, 1968

Notes: Lena River estuary, Russia (Gagarin 1999a, Gagarin 1999b, Gagarin 2001b); Taymyr and Severnaya Zemlya, Russia (Gagarin 1990, Gagarin 1996, Gagarin 1999a, Gagarin 2001a, Gagarin 2001b); Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 1999a, Gagarin 2001b).

Allodorylaimus uniformis (Thorne, 1929)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 1999a, Gagarin 2001b).

Eudorylaimus acuticauda (de Man, 1880)

Nomenclature:

Dorylaimus acuticauda de Man, 1880; *Dorylaimus carteri acuticauda* Micoletzky, 1922; *Dorylaimus carteri* Bastian, 1865 sf. *acuticaudata* de Man, 1880 (lapsus); *Dorylaimus carteri* Bastian, 1865 var. *brevicaudatus* f. *typica* sf. *acuticauda* de Man, 1880

Notes: Jan Mayen (Allgén 1953); Greenland (Allgén 1954, Ditlevsen 1927); Taymyr and Severnaya Zemlya, Russia (Kuzmin 1972, Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Steiner 1916b).

Eudorylaimus acutus (Thorne & Swanger, 1936)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin 1986, Kuzmin and Gagarin 1990).

Eudorylaimus bureshi (Andrássy, 1958)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Eudorylaimus carteri (Bastian, 1865)

Nomenclature:

Dorylaimus carteri Bastian, 1865

Notes: Svalbard (Klekowski and Opalinski 1986, Klekowski and Opalinski 1990, Klekowski and Opalinski 1992, Opalinski and Klekowski 1992); Jan Mayen (Allgén 1953); Greenland (Ditlevsen 1927); Alaska (Andrássy 2003c); Taymyr and Severnaya Zemlya, Russia (Gagarin 1996, Gagarin and Kuzmin 1983, Kuzmin 1972, Kuzmin 1976, Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Steiner 1916b).

Eudorylaimus centrocercus (de Man, 1880)

Nomenclature:

Dorylaimus centrocercus de Man, 1880; *Aporcelaimellus centrocercus* (de Man, 1880)

Notes: Jan Mayen (Allgén 1953); Taymyr and Severnaya Zemlya, Russia (Gagarin 1990, Gagarin 2001b, Gagarin 2001a, Kuzmin and Gagarin 1990).

Eudorylaimus iners (Bastian, 1865)

Nomenclature:

Dorylaimus gracilis de Man, 1876

Notes: Jan Mayen (Allgén 1953).

Eudorylaimus leuckarti (Bütschli, 1873)

Nomenclature:

Dorylaimus carteri Bastian, 1865 var. *brevicaudatus* Micoletzly, 1922 f. *typica* Micoletzky, 1922

Notes: Greenland (Allgén 1954).

Eudorylaimus megodon Loof, 1971*

Notes: Svalbard (Loof 1971).

Eudorylaimus subjunctus Loof, 1971*

Notes: Svalbard (Loof 1971).

Eudorylaimus vanrosseni Loof, 1971*

Notes: Svalbard (Loof 1971).

Epidorylaimus agilis (de Man, 1880)

Nomenclature:

Dorylaimus agilis de Man, 1880; *Dorylaimus carteri* Bastian, 1865 var. *agilis* de Man, 1880; *Eudorylaimus agilis* (de Man, 1880); *Laimydorus agilis* (de Man, 1880)

Notes: Svalbard (Loof 1971); Jan Mayen (Allgén 1953); Greenland (Allgén 1954); Taymyr and Severnaya Zemlya, Russia (Kuzmin 1986, Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Steiner 1916b).

Epidorylaimus angulosus (Thorne & Swanger, 1936)

Nomenclature:

Eudorylaimus anquilosus (Thorne & Swanger, 1936)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin 1972, Kuzmin and Gagarin 1990).

Epidorylaimus consobrinus (de Man, 1918)

Notes: Taymyr and Severnaya Zemlya, Russia (Gagarin 1996, Kuzmin and Gagarin 1990).

Epidorylaimus humilis (Thorne & Swanger, 1936)

Nomenclature:

Eudorylaimus humilis (Thorne & Swanger, 1936)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin 1972, Kuzmin and Gagarin 1990).

Epidorylaimus lugdunensis (de Man, 1880)

Nomenclature:

Dorylaimus carteri Bastian, 1865 sf. *lugdunensis* de Man, 1880; *Dorylaimus carteri lugdunensis* Micoletzky, 1922; *Eudorylaimus lugdunensis* (de Man, 1880); *Dorylaimus reisingeri* Ditlevsen, 1927*

Notes: Svalbard (Loof 1971); Jan Mayen (Allgén 1953); Greenland (Ditlevsen 1927); Alaska (Andrássy 2003c); Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Epidorylaimus muscorum (Skwarra, 1921)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Epidorylaimus rivalis Gagarin, 1991*

Notes: Taymyr and Severnaya Zemlya, Russia (Gagarin 1990, Gagarin 1991b, Gagarin 2001b, Gagarin 2001a).

Microdorylaimus parvus (de Man, 1880)

Nomenclature:

Eudorylaimus parvus (de Man, 1880)

Notes: Svalbard (Loof 1971); Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Crassolabium circulifer (Loof, 1961)

Nomenclature:

Eudorylaimus circulifer Loof, 1961

Notes: Svalbard (Loof 1971).

Crassolabium ettersbergense (de Man, 1885)

Nomenclature:

Eudorylaimus ettersbergensis (de Man, 1885); *Thonus ettersbergensis* (de Man, 1885)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin 1972, Kuzmin and Gagarin 1990).

Crassolabium laticollis (de Man, 1906)

Nomenclature:

Thonus laticollis (de Man, 1906)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Dorydorella bryophila (de Man, 1880)

Nomenclature:

Dorylaimus carteri Bastian, 1865 sf. *briophilus* de Man, 1880

Notes: Jan Mayen (Allgén 1953).

Dorydorella pratensis (de Man, 1880)

Nomenclature:

Dorylaimus carteri Bastian, 1865 sf. *pratensis* de Man, 1880

Notes: Jan Mayen (Allgén 1953).

Ecumenicus monohystera (de Man, 1880)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Labronema fimbriatum Thorne, 1939

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Labronema goodeyi Altherr in Altherr & Delamare-Deboutteville, 1972

Notes: Taymyr and Severnaya Zemlya, Russia (Gagarin 1990, Gagarin 2001b, Gagarin 2001a).

Labronema loeffleri Andrássy, 1978

Notes: Lena River estuary, Russia (Gagarin 2001b); Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a).

Labronema stechlinense Altherr, 1968

Notes: Alaska (Andrássy 2003c).

Family Aporcelaimidae

Akrotonus striaticaudatus (Cobb, 1906)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Aporcelaimellus krygeri (Ditlevsen, 1928)

Nomenclature:

Eudorylaimus krygeri (Ditlevsen, 1928)

Notes: Taymyr and Severnaya Zemlya, Russia (Gagarin 2001b, Kuzmin 1972, Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Gagarin 2001b).

Aporcelaimellus obscurus (Thorne & Swanger, 1936)

Nomenclature:

Eudorylaimus obscurus (Thorne & Swanger, 1936)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin 1972, Kuzmin and Gagarin 1990).

Aporcelaimellus obtusicaudatus (Bastian, 1865)

Nomenclature:

Dorylaimus obtusicaudatus Bastian, 1865; *Dorylaimus obtusicaudatus* Bastian, 1865 f. *butschlii* Micoletzky, 1922; *Aporcelaimus obtusicaudatus* (Bastian, 1865)

Notes: Jan Mayen (Allgén 1953, Allgén 1954); Greenland (Allgén 1954, Ditlevsen 1927); Taymyr and Severnaya Zemlya, Russia (Gagarin 1990, Gagarin 2001b, Gagarin 2001a, Kuzmin and Gagarin 1990).

Aporcelaimellus papillatus (Bastian, 1865)

Nomenclature:

Aporcelaimus papillatus (Bastian, 1865)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Aporcelaimellus paraobtusicaudatus (Micoletzky, 1922)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Aporcelaimellus tritici (Bastian, 1865)

Nomenclature:

Dorylaimus tritici Bastian, 1865

Notes: Jan Mayen (Allgén 1953); Greenland (Allgén 1954).

Aporcelaimus eurydoris (Ditlevsen, 1911)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Aporcelaimus polaris Andrássy, 2003*

Notes: Alaska (Andrássy 2003c).

Aporcelaimus superbus (de Man, 1880)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Metaporcelaimus labiatus (de Man, 1880)

Nomenclature:

Dorylaimus labiatus de Man, 1880

Notes: Jan Mayen (Allgén 1953).

Family Crateronematidae

Chrysonema maksymovi (Altherr, 1963)

Nomenclature:

Eudorylaimus maksymovi (Altherr, 1963)

Notes: Svalbard (Klekowski and Opalinski 1986, Klekowski and Opalinski 1990, Loof 1971).

Family Nordiidae

Enchodelus analatus (Ditlevsen, 1927)

Nomenclature:

Dorylaimus (*Doryllium*) *analatus* Ditlevsen, 1927*

Notes: Svalbard (Loof 1971); Greenland (Ditlevsen 1927).

Enchodelus groenlandicus (Ditlevsen, 1927)

Nomenclature:

Dorylaimus (*Doryllium*) *groenlandicus* Ditlevsen 1927*

Notes: Greenland (Ditlevsen 1927); Taymyr and Severnaya Zemlya, Russia (Elshishka et al. 2012).

Enchodelus cf. macrodoroides (Steiner, 1914)

Notes: Svalbard (Loof 1971).

Enchodelus macrodorus (de Man, 1880)

Nomenclature:

Dorylaimus macrodorus de Man, 1880

Notes: Svalbard (Loof 1971); Jan Mayen (Allgén 1953); Lena River estuary, Russia (Gagarin 2001b); Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 2001b, Steiner 1916a).

Enchodelus makarovae Elshishka et al., 2012*

Notes: Taymyr and Severnaya Zemlya, Russia (Elshishka et al. 2012).

Enchodelus parateres Baqri & Jairajpuri, 1974

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin 1986, Kuzmin and Gagarin 1990).

Enchodelus parvus Loof, 1971*

Notes: Svalbard (Loof 1971); Taymyr and Severnaya Zemlya, Russia (Kuzmin 1986, Kuzmin and Gagarin 1990).

Enchodelus teres Thorne, 1939

Notes: Taymyr and Severnaya Zemlya, (Kuzmin and Gagarin 1990).

Heterodorus arquatus (Thorne, 1939)

Nomenclature:

Enchodelus arquatus Thorne, 1939

Notes: Nunavut, Canada (Elshishka et al. 2013); Taymyr and Severnaya Zemlya, Russia (Elshishka et al. 2013, Kuzmin and Gagarin 1990).

Heterodorus conicaudatus (Ditlevsen, 1927)

Nomenclature:

Dorylaimus conicaudatus Ditlevsen, 1927*; *Enchodelus conicaudatus* (Ditlevsen, 1927)

Notes: Svalbard (Loof 1971); Greenland (Ditlevsen 1927).

Heterodorus magnificus Altherr, 1952

Notes: Taymyr and Severnaya Zemlya, Russia (Elshishka et al. 2013).

Pungentus longidens (Thorne & Swanger, 1936)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Rhyssocolpus alleni (Brzeski, 1962)

Nomenclature:

Eudorylaimus alleni Brzeski, 1962*

Notes: Svalbard (Brzeski 1962, Loof 1971).

Rhyssocolpus aquilonius Andrássy, 2003*

Notes: Alaska (Andrássy 2003c).

Rhyssocolpus arcticus Ebsary, 1984*

Notes: Nunavut, Canada (Ebsary 1984).

Longidorella magna Loof, 1971*

Notes: Svalbard (Loof 1971); Alaska (Andrássy 2003c).

Longidorella parva Thorne, 1939

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Longidorella penetrans (Thorne & Swanger, 1936)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Family Leptonchidae

Xiphinemella eversum Heyns, 1969

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Family Tylencholaimidae

Tylencholaimus crassus Loof & Jairajpuri, 1968

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Tylencholaimus mirabilis (Bütschli, 1873)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Tylencholaimus proximus Thorne, 1939

Notes: Svalbard (Loof 1971); Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Tylencholaimus stecki Steiner, 1914

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Tylencholaimus teres Thorne, 1939

Notes: Svalbard (Loof 1971); Taymyr and Severnaya Zemlya, Russia (Kuzmin 1972, Kuzmin 1976, Kuzmin and Gagarin 1990).

Family Mydonomidae

Dorylaimoides arcuicaudatus Baqri & Jairajpuri, 1969

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin 1972, Kuzmin and Gagarin 1990).

Family Tylencholaimellidae

Tylencholaimellus coronatus Thorne, 1939

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin 1972, Kuzmin and Gagarin 1990).

Order MONONCHIDA

Family Mononchidae

Mononchus absconditus (Tsalolikhin, 1974)

Notes: Lena River estuary, Russia (Gagarin 2001b); Taymyr and Severnaya Zemlya, Russia (Gagarin 1990, Gagarin 1993, Gagarin 2001b, Gagarin 2001a); Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 2001b).

Mononchus angarensis Gagarin, 1984

Notes: Taymyr and Severnaya Zemlya, Russia (Gagarin 1996, Gagarin 2001b).

Mononchus aquaticus Coetzee, 1968

Notes: Taymyr and Severnaya Zemlya, Russia (Gagarin 2001b).

Mononchus maduei Schneider, 1925

Notes: Northwest territories, Canada (Mulvey 1978).

Mononchus niddensis Skwarra, 1921

Notes: Nunavut, Canada (Mulvey 1967b, Mulvey 1978).

Mononchus superbus Mulvey, 1978*

Notes: Northwest territories, Canada (Mulvey 1978).

Mononchus tajmiris Gagarin, 1991*

Notes: Taymyr and Severnaya Zemlya, Russia (Gagarin 1990, Gagarin 1991b, Gagarin 1993, Gagarin 2001a, Gagarin 2001b).

Mononchus truncatus Bastian, 1865

Notes: Northwest territories, Canada (Mulvey 1978); Taymyr and Severnaya Zemlya, Russia (Gagarin 1990, Gagarin 1996, Gagarin 2001b, Gagarin 2001a, Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 2001b).

Paramononchus arcticus Mulvey, 1978*

Notes: Northwest territories, Canada (Mulvey 1978).

Prionchulus longus (Thorne, 1929)

Notes: Nunavut, Canada (Mulvey 1967a, Mulvey 1978); Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Prionchulus major Gagarin, 2001*

Notes: Novaya Zemlya and Vaigach island, Russia (Gagarin 2001c, Gagarin 2001b).

Prionchulus muscorum (Dujardin, 1845)

Notes: Svalbard (Klekowski and Opalinski 1986, Klekowski and Opalinski 1990); Nunavut, Canada (Mulvey 1967a); Alaska (Andrássy 2003a); Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 2001b).

Prionchulus punctatus Cobb, 1917

Notes: Nunavut, Canada (Mulvey 1967a).

Prionchulus sedatus Gagarin, 2000*

Notes: Lena River estuary, Russia (Gagarin 2000, Gagarin 2001b).

Prionchulus spectabilis (Ditlevsen, 1911)

Nomenclature:

Mononchus spectabilis Ditlevsen, 1911

Notes: Greenland (Ditlevsen 1927).

Clarkus macropapillatus (Mulvey, 1967)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Clarkus papillatus (Bastina, 1865)

Nomenclature:

Mononchus papillatus Bastian, 1865

Notes: Jan Mayen (Allgén 1953); Greenland (Allgén 1954, Ditlevsen 1927); Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Steiner 1916b).

Coomansus fletcherensis Mulvey, 1978*

Notes: Nunavut, Canada (Mulvey 1978).

Coomansus gerlachei (de Man, 1904)

Notes: Northwest territories, Canada (Mulvey 1978).

Coomansus parvus (de Man, 1880)

Notes: Alaska (Andrássy 2003a).

Parkellus zschokkei (Menzel, 1913)

Nomenclature:

Iotonchus zschokkei (Menzel, 1913)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin 1972, Kuzmin and Gagarin 1990).

Family Mylonchulidae

Mylonchulus brachyuris (Bütschli, 1873)

Nomenclature:

Mononchus brachyuris Bütschli, 1873

Notes: Greenland (Ditlevsen 1927); Alaska (Andrássy 2003a); Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Steiner 1916b).

Mylonchulus gigas Gagarin, 1993

Notes: Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 2001b).

Mylonchulus incurvus Cobb, 1917

Notes: Taymyr and Severnaya Zemlya, Russia (Gagarin 2001b).

Mylonchulus lacustris (Cobb in Cobb, 1915)

Notes: Northwest territories, Canada (Mulvey 1978).

Family Anatonchidae

Miconchus exilis (Cobb, 1917)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Family Iotonchidae

Jensenonchus amplus Andrássy, 2003*

Notes: Alaska (Andrássy 2003a).

Order CHROMADORIDA

Family Chromadoridae

Chromadorita arctica Gagarin, 1999*

Nomenclature:

Chromadorida arctica Gagarin, 1999 (lapsus)

Notes: Novaya Zemlya and Vaigach island, Russia (Gagarin 1999a, Gagarin 2001b).

Chromadorita leuckarti (de Man, 1876)

Notes: Lena River estuary, Russia (Gagarin 2001b); Taymyr and Severnaya Zemlya, Russia (Gagarin 1996); Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 2001b).

Punctodora ratzemburgensis (Linstow, 1876)

Notes: Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 2001b).

Family Achromadoridae

Achromadora micoletzkyi (Stefanski, 1915)

Nomenclature:

Cyatholaimus micoletzkyi Steiner, 1916*; *Achromadora steineri* Mulvey, 1969

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin 1976, Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Steiner 1916b).

Achromadora ruricola (de Man, 1880)

Notes: Nunavut, Canada (Mulvey 1969c); Taymyr and Severnaya Zemlya, Russia (Kuzmin 1972, Kuzmin and Gagarin 1990).

Achromadora cf. semiarmata Altherr, 1952

Notes: Svalbard (Loof 1971).

Achromadora tenax (de Man, 1876)

Notes: Svalbard (Janiec 1997, Loof 1971).

Achromadora terricola (de Man, 1880)

Nomenclature:

Cyatholaimus ornatus Steiner, 1916*

Notes: Greenland (Ditlevsen 1927); Nunavut, Canada (Mulvey 1969c); Lena River estuary, Russia (Gagarin 2001b); Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 2001b, Steiner 1916a).

Family Ethmolaimidae

Ethmolaimus pratensis de Man, 1880

Nomenclature:

Ethmolaimus arcticus Steiner, 1916*

Notes: Nunavut, Canada (Mulvey 1969c); Lena River estuary, Russia (Gagarin 2001b); Taymyr and Severnaya Zemlya, Russia (Gagarin 1990, Gagarin 1996, Gagarin 2001b, Gagarin 2001a, Kuzmin 1972, Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 2001b, Steiner 1916a).

Order DESMODORIDA

Family Microlaimidae

Microlaimus globiceps de Man, 1880

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Prodesmodora arctica (Mulvey, 1969)

Nomenclature:

Microlaimus arcticus Mulvey 1969*

Notes: Nunavut, Canada (Mulvey 1969c); Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 2001b).

Prodesmodora circulata (Micoletzky, 1913)

Notes: Lena River estuary, Russia (Gagarin 2001b); Taymyr and Severnaya Zemlya, Russia (Gagarin 1996, Kuzmin 1976, Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 2001b).

Order MONHYSTERIDA

Family Xyalidae

Hofmaenneria hazanensis Mulvey, 1969*

Notes: Nunavut, Canada (Mulvey 1969c).

Daptonema dubium (Bütschli, 1873)

Notes: Taymyr and Severnaya Zemlya, Russia (Gagarin 1996, Gagarin and Kuzmin 1983, Kuzmin and Gagarin 1990).

Daptonema fortis Gagarin, 1993*

Notes: Taymyr and Severnaya Zemlya, Russia (Gagarin 1990, Gagarin 1993, Gagarin 2001b, Gagarin 2001a).

Daptonema sibiricum Gagarin, 2000*

Notes: Lena River estuary, Russia (Gagarin 2000, Gagarin 2001b).

Daptonema tenuispiculum (Ditlevsen, 1918)

Notes: Novaya Zemlya and Vaigach island, Russia (Gagarin 1999a, Gagarin 2001b).

Theristus agilis (de Man, 1880)

Nomenclature:

Monhystera agilis de Man, 1880

Notes: Jan Mayen (Allgén 1953, Tchesunov and Pletnikova 1986); Taymyr and Severnaya Zemlya, Russia (Kuzmin 1972, Kuzmin 1976, Kuzmin and Gagarin 1990).

Theristus flevensis Schuurmans Stekhoven, 1935

Notes: Novaya Zemlya and Vaigach island, Russia (Gagarin 1997b, Gagarin 2001a).

Family Monhysteridae

Eumonhystera barbata Andrássy, 1981

Notes: Novaya Zemlya and Vaigach island, Russia (Gagarin 1997b, Gagarin 2001a).

Eumonhystera dispar (Bastian, 1865)

Nomenclature:

Monhystera dispar Bastian, 1865

Notes: Svalbard (Loof 1971); Nunavut, Canada (Mulvey 1969c); Taymyr and Severnaya Zemlya, Russia (Gagarin 1996); Novaya Zemlya and Vaigach island, Russia (Gagarin 1997b, Gagarin 1997a, Gagarin 1999a, Gagarin 2001b).

Eumonhystera filiformis (Bastian, 1865)

Nomenclature:

Monohystera filiformis Bastian, 1865 (lapsus); *Monhystera filiformis* Butschlii, 1873 (lapsus)

Notes: Svalbard (Janiec 1997, Loof 1971); Lena River estuary, Russia (Gagarin 2001b); Taymyr and Severnaya Zemlya, Russia (Kuzmin 1972, Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 2001b, Steiner 1916a).

Eumonhystera kuzmini Gagarin, 1997*

Notes: Novaya Zemlya and Vaigach island, Russia (Gagarin 1997b, Gagarin 1997a, Gagarin 1999a, Gagarin 2001b).

Eumonhystera maxima Gagarin, 1996

Notes: Taymyr and Severnaya Zemlya, Russia (Gagarin 2001b).

Eumonhystera papuana (Daday, 1899)

Notes: Taymyr and Severnaya Zemlya, Russia (Gagarin 1996, Gagarin 2001b).

Eumonhystera pseudobulbosa (Daday, 1896)

Nomenclature:

Monohystera pseudobulbosa Daday, 1896 (lapsus)

Notes: Greenland (Ditlevsen 1927).

Eumonhystera similis (Bütschli, 1873)

Notes: Taymyr and Severnaya Zemlya, Russia (Gagarin 2001b, Kuzmin and Gagarin 1990).

Eumonhystera simplex (de Man, 1880)

Nomenclature:

Monhystera simplex de Man, 1880

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin 1972, Kuzmin and Gagarin 1990).

Eumonhystera tuporis Gagarin, 1991

Notes: Novaya Zemlya and Vaigach island, Russia (Gagarin 1999a, Gagarin 2001b).

Eumonhystera vulgaris (de Man, 1880)

Nomenclature:

Monhystera vulgaris de Man, 1880; *Monohystera vulgaris* de Man, 1880 (lapsus)

Notes: Svalbard (Janiec 1997, Loof 1971); Jan Mayen (Allgén 1953); Nunavut, Canada (Mulvey 1969c); Lena River estuary, Russia (Gagarin 2001b); Taymyr and Severnaya Zemlya, Russia (Gagarin 1996, Kuzmin and Gagarin 1990); Novaya Zemlya and

Vaigach island, Russia (Gagarin 1997a, Gagarin 1999a, Gagarin 2001b, Steiner 1916a).

Geomonhystera aenariensis (Meyl, 1953)

Notes: Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 2001b).

Geomonhystera paravillosa (Meyl, 1954)

Nomenclature:

Monhystera paravillosa Meyl, 1954

Notes: Nunavut, Canada (Mulvey 1969c).

Geomonhystera villosa (Butschli, 1873)

Nomenclature:

Monohystera villosa Butschli, 1873 (lapsus)

Notes: Svalbard (Loof 1971); Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Steiner 1916b).

Halomonhystera disjuncta (Bastian, 1865)

Nomenclature:

Monhystera disjuncta Bastian, 1865

Notes: Jan Mayen (Allgén 1953); Novaya Zemlya and Vaigach island, Russia (Gagarin 1999a, Gagarin 2001b).

Monhystera amabilis Gagarin, 1997*

Notes: Novaya Zemlya and Vaigach island, Russia (Gagarin 1997b, Gagarin 1997a, Gagarin 2001c, Gagarin 2001b).

Monhystera stagnalis Bastian, 1865

Notes: Svalbard (Janiec 1997, Loof 1971); Taymyr and Severnaya Zemlya, Russia (Gagarin and Kuzmin 1983, Kuzmin and Gagarin 1990).

Monhystrella macrura (de Man, 1880)

Nomenclature:

Monhystera macrura de Man, 1880

Notes: Jan Mayen (Allgén 1953).

Tridentula bidenticulata (Gagarin, 1997)

Nomenclature:

Eumonhystera bidenticulata Gagarin, 1997*; *Tridentulus diplodenticulata* Gagarin, 1997 (lapsus); *Eumonhystera diplodenticulata* Gagarin, 1997 (lapsus)

Notes: Novaya Zemlya and Vaigach island, Russia (Gagarin 1997b, Gagarin 1997a, Gagarin 2001b).

Tridentula obscura (Gagarin, 2000)

Nomenclature:

Tridentulus obscurus Gagarin, 2000

Notes: Novaya Zemlya and Vaigach island, Russia (Gagarin 2001b).

Order ARAEOLAIMIDA

Family Diplopeltidae

Cylindrolaimus baradlanus Andrássy, 1959

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin 1972, Kuzmin and Gagarin 1990).

Cylindrolaimus communis de Man, 1880

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Cylindrolaimus melancholicus de Man, 1880

Notes: Svalbard (Loof 1971); Nunavut, Canada (Mulvey 1969c); Lena River estuary, Russia (Gagarin 2001b); Taymyr and Severnaya Zemlya, Russia (Kuzmin 1972, Kuzmin and Gagarin 1990).

Order PLECTIDA

Family Camacolaimidae

Deontolaimus papillatus de Man, 1880

Notes: Greenland (Ditlevsen 1927).

Family Chronogastridae

Chronogaster typica (de Man, 1921)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Family Plectidae

Anaplectus grandepapillatus (Ditlevsen, 1928)

Nomenclature:

Anaplectus submersus (Hirschmann, 1952)

Notes: Svalbard (Janiec 1997); Alaska (Andrássy 2003b); Lena River estuary, Russia (Gagarin 2001b); Taymyr and Severnaya Zemlya, Russia (Gagarin 1990, Gagarin 1993, Gagarin 2001b, Gagarin 2001a, Kuzmin and Gagarin 1990).

Anaplectus granulosus (Bastian, 1865)

Nomenclature:

Plectus granulosus Bastian, 1865

Notes: Svalbard (Loof 1971); Jan Mayen (Allgén 1953); Greenland (Ditlevsen 1927); Taymyr and Severnaya Zemlya, Russia (Gagarin 1990, Gagarin 1996, Gagarin 2001b, Gagarin 2001a, Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 1999a, Gagarin 2001b, Steiner 1916a).

Anaplectus porosus Allen and Noffsinger, 1968

Notes: Svalbard (Klekowski and Opalinski 1986, Klekowski and Opalinski 1990, Klekowski and Opalinski 1992, Loof 1971).

Arctiplectus alaskanus Andrássy, 2003*

Notes: Alaska (Andrássy 2003b).

Perioplectus labiosus (Sanwal, 1968)

Nomenclature:

Periplectus labiosus Sanwal, 1968*

Notes: Nunavut, Canada (Sanwal 1968, Zell 1993).

Perioplectus secundus Andrássy, 2003*

Notes: Alaska (Andrássy 2003b).

Plectus acuminatus Bastian, 1865

Notes: Svalbard (Loof 1971); Alaska (Andrássy 2003b); Taymyr and Severnaya Zemlya, Russia (Gagarin 2001b, Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 2001b).

Plectus amorphotelus Ebsary, 1985

Notes: Svalbard (Zell 1993).

Plectus aquatilis Andrássy, 1984

Notes: Svalbard (Janiec 1997).

Plectus cf. armatus Butschli, 1873

Notes: Svalbard (Loof 1971).

Plectus assimilis Bütschli, 1873

Nomenclature:

Ceratoplectus assimilis (Bütschli, 1873)

Notes: Svalbard (Loof 1971); Greenland (Zell 1993); Alaska (Andrássy 2003b); Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Plectus cancellatus Zullini, 1978

Nomenclature:

Plectus thornei sensu Zell, 1993

Notes: Nunavut, Canada (Ebsary 1985, Zell 1993).

Plectus cirratus Bastian, 1865

Notes: Svalbard (Klekowski and Opalinski 1986, Klekowski and Opalinski 1990, Klekowski and Opalinski 1992, Menzel 1920); Jan Mayen (Allgén 1953); Greenland (Ditlevsen 1927); Alaska (Andrássy 2003b); Lena River estuary, Russia (Gagarin 2001b); Taymyr and Severnaya Zemlya, Russia (Gagarin 1990, Gagarin 1996, Gagarin 2001b, Gagarin 2001a, Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 1999a, Gagarin 2001b).

Plectus communis Bütschli, 1873

Notes: Svalbard (Menzel 1920, Zell 1993); Iceland (Zell 1993); Greenland (Allgén 1954).

Plectus cornus Maggenti, 1961

Nomenclature:

Ceratoplectus cornus (Maggenti, 1961)

Notes: Svalbard (Loof 1971, Zell 1993); Taymyr and Severnaya Zemlya, Russia (Kuzmin 1976, Kuzmin and Gagarin 1990).

Plectus elongatus Maggenti, 1961

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Plectus geophilus de Man, 1880

Nomenclature:

Plectus minor Novikova & Gagarin, 1971

Notes: Svalbard (Loof 1971, Zell 1993); Jan Mayen (Allgén 1953); Taymyr and Severnaya Zemlya, Russia (Kuzmin 1986, Kuzmin and Gagarin 1990).

Plectus inquirendus Andrássy, 1958

Notes: Svalbard (Loof 1971, Zell 1993); Alaska (Andrássy 2003b); Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Plectus intermedius Cobb, 1893

Notes: Nunavut, Canada (Zell 1993).

Plectus longicaudatus Butschli, 1873

Notes: Svalbard (Loof 1971, Zell 1993); Jan Mayen (Allgén 1953); Iceland (Zell 1993); Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Steiner 1916b).

Plectus magadani Kuzmin, 1979

Notes: Svalbard (Zell 1993).

Plectus murrayi Yeates, 1970

Notes: Svalbard (Zell 1993).

Plectus cf. opisthocirculus Andrássy, 1952

Notes: Svalbard (Janiec 1997).

Plectus palustris de Man, 1880

Notes: Lena River estuary, Russia (Gagarin 2001b); Taymyr and Severnaya Zemlya, Russia (Gagarin 1996, Gagarin 2001b); Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 1999a, Gagarin 2001b).

Plectus parietinus Bastian, 1865

Nomenclature:

Plectus cirratus Bastian, 1865 f. *parietinus* Bastian, 1865

Notes: Svalbard (Janiec 1997, Klekowski and Opalinski 1986, Klekowski and Opalinski 1990, Klekowski and Opalinski 1992, Loof 1971, Opalinski and Klekowski 1992); Jan Mayen (Allgén 1953); Iceland (Zell 1993); Alaska (Andrássy 2003b); Taymyr and Severnaya Zemlya, Russia (Gagarin 1990, Gagarin 1996, Gagarin 2001b, Gagarin 2001a, Gagarin and Kuzmin 1983, Kuzmin 1976, Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 2001b, Steiner 1916a).

Plectus parvus Bastian, 1865

Notes: Svalbard (Loof 1971, Zell 1993); Iceland (Zell 1993); Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 2001b).

Plectus rhizophilus de Man, 1880

Nomenclature:

Plectus cirratus Bastian, 1865 var. *rhizophilus* de Man, 1880

Notes: Svalbard (Loof 1971, Zell 1993); Jan Mayen (Allgén 1953, Steiner 1916a); Greenland (Allgén 1954); Lena River estuary, Russia (Gagarin 2001b); Taymyr and Severnaya Zemlya, Russia (Gagarin and Kuzmin 1983, Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 2001b, Steiner 1916a).

Plectus rotundilabiatus Zell, 1993

Notes: Iceland (Zell 1993).

Plectus tenuis Bastian, 1865

Notes: Lena River estuary, Russia (Gagarin 2001b); Taymyr and Severnaya Zemlya, Russia (Gagarin 1996); Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 1999a, Gagarin 2001b).

Plectus varians Maggenti, 1961

Notes: Iceland (Zell 1993); Taymyr and Severnaya Zemlya, Russia (Kuzmin 1976).

Plectus velox Bastian, 1865

Notes: Svalbard (Zell 1993).

Tylocephalus auriculatus (Bütschli, 1873)

Nomenclature:

Plectus auriculatus Bütschli, 1873

Notes: Jan Mayen (Steiner 1916a); Nunavut, Canada (Anderson 1966); Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Ereptonema arcticum Loof, 1971*

Notes: Svalbard (Boström 1987a, Holovachov et al. 2003, Loof 1971).

Ereptonema fimbriatum Anderson, 1966*

Notes: Nunavut, Canada (Anderson 1966).

Wilsonema otophorum (de Man, 1880)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 2001b).

Family Metateratocephalidae

Metateratocephalus crassidens (de Man, 1880)

Nomenclature:

Teratocephalus crassidens de Man, 1880; *Euteratocephalus crassidens* (de Man, 1880)

Notes: Svalbard (Boström 1989, Loof 1971); Jan Mayen (Allgén 1953); Taymyr and Severnaya Zemlya, Russia (Kuzmin 1972, Kuzmin 1976, Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 2001b, Steiner 1916a).

Euteratocephalus palustris (de Man, 1880)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin 1972, Kuzmin and Gagarin 1990).

Family Aulolaimidae

Aulolaimus oxycephalus de Man, 1880

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin 1986, Kuzmin and Gagarin 1990).

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Family Teratocephalidae

Teratocephalus costatus Andrássy, 1958

Nomenclature:

Teratocephalus decarinus Anderson, 1969*

Notes: Svalbard (Boström 1989, Loof 1971); Nunavut, Canada (Anderson 1969); Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 2001b).

Teratocephalus dadayi Andrássy, 1968

Nomenclature:

Teratocephalus subvexus Anderson, 1969*

Notes: Nunavut, Canada (Anderson 1969).

Teratocephalus lirellus Anderson, 1969*

Notes: Svalbard (Boström 1989, Loof 1971); Nunavut, Canada (Anderson 1969); Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Teratocephalus tenuis Andrássy, 1958

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Teratocephalus terrestris (Bütschli, 1873)

Notes: Svalbard (Boström 1989); Jan Mayen (Allgén 1953); Taymyr and Severnaya Zemlya, Russia (Kuzmin 1972, Kuzmin 1976, Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Steiner 1916b).

Family Alloionematidae

Rhabditophanes schneideri (Bütschli, 1873)

Nomenclature:

Cheilobus quadrilabiatus Cobb, 1924

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin 1972, Kuzmin and Gagarin 1990).

Family Panagrolaimidae

Panagrolaimus papillosus Loof, 1971*

Notes: Svalbard (Loof 1971).

Panagrolaimus rigidus (Schneider, 1866)

Notes: Svalbard (Loof 1971); Taymyr and Severnaya Zemlya, Russia (Kuzmin 1976, Kuzmin and Gagarin 1990).

Family Cephalobidae

Cephalobus filiformis de Man, 1876

Nomenclature:

species inquirenda

Notes: Jan Mayen (Allgén 1953).

Cephalobus persegnis Bastian, 1865

Notes: Svalbard (Loof 1971); Jan Mayen (Allgén 1953); Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Acrobeloides buetschlii (de Man, 1884)

Nomenclature:

Cephalobus buetschlii de Man, 1884

Notes: Svalbard (Menzel 1920); Jan Mayen (Steiner 1916a); Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Acrobeloides enoploides Loof, 1971*

Notes: Svalbard (Loof 1971).

Acrobeloides nanus (de Man, 1880)

Nomenclature:

Cephalobus nanus de Man, 1880

Notes: Svalbard (Loof 1971).

Acrobeloides tricornis (Thorne, 1925)

Notes: Svalbard (Boström 1987a, Loof 1971).

Eucephalobus arcticus Loof, 1971*

Notes: Svalbard (Boström 1987a, Loof 1971).

Eucephalobus mucronatus (Kozlovska & Roguska-Wasilewska, 1963)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Eucephalobus oxyuroides (de Man, 1876)

Nomenclature:

Cephalobus oxyuroides de Man, 1876

Notes: Svalbard (Loof 1971); Jan Mayen (Allgén 1953).

Eucephalobus paracornutus De Coninck, 1943

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin 1972, Kuzmin and Gagarin 1990).

Eucephalobus striatus (Bastian, 1865)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin 1972, Kuzmin and Gagarin 1990).

Pseudacrobeles elongatus (de Man, 1880)

Nomenclature:

Cephalobus elongatus de Man, 1880; *Heterocephalobus elongatus* (de Man, 1880)

Notes: Svalbard (Loof 1971); Jan Mayen (Allgén 1953); Taymyr and Severnaya Zemlya, Russia (Gagarin 2001b, Kuzmin 1972, Kuzmin and Gagarin 1990).

Chiloplacus lentus (Maupas, 1900)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin 1972, Kuzmin and Gagarin 1990).

Chiloplacus quintastriatus Sumenkova in Sumenkova & Razjivin, 1968

Nomenclature:

Chiloplacus saccatus Loof, 1971*

Notes: Svalbard (Boström 1987a, Loof 1971).

Chiloplacus symmetricus (Thorne, 1925)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Chiloplacus trilineatus Steiner, 1940

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Stegelletina insubrica (Steiner, 1914)

Nomenclature:

Cervidellus insubricus (Steiner, 1914); *Ypsylonellus insubricus* (Steiner, 1914)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin 1972, Kuzmin and Gagarin 1990).

Stegelletina similis (Thorne, 1925)

Nomenclature:

Stegelleta mucronata Loof, 1971*

Notes: Svalbard (Loof 1971).

Cervidellus vexilliger (de Man, 1880)

Nomenclature:

Cervidellus serratus (Thorne, 1925); *Ypsylonellus vexilliger* (de Man, 1880)

Notes: Svalbard (Loof 1971); Taymyr and Severnaya Zemlya, Russia (Kuzmin 1972, Kuzmin and Gagarin 1990).

Cervidellus spitzbergensis Boström, 1987*

Notes: Svalbard (Boström 1987b).

Acrobeles ciliatus von Linstow, 1877

Notes: Svalbard (Loof 1971); Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Family Aphelenchoididae

Aphelenchoides arcticus Sanwal, 1965*

Notes: Svalbard (Loof 1971); Nunavut, Canada (Sanwal 1965); Lena River estuary, Russia (Gagarin 2001b).

Aphelenchoides blastophthorus Franklin, 1952

Notes: Lena River estuary, Russia (Gagarin 2001b).

Aphelenchoides echinocaudatus Haque, 1968

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin 1972, Kuzmin and Gagarin 1990).

Aphelenchoides goeldii (Steiner, 1914)

Nomenclature:

Aphelenchus goeldii Steiner, 1914

Notes: Jan Mayen (Steiner 1916a).

Aphelenchoides parasaprophilus Sanwal, 1965*

Notes: Nunavut, Canada (Sanwal 1965); Taymyr and Severnaya Zemlya, Russia (Gagarin 2001b).

Aphelenchoides parietinus (Bastian, 1865)

Nomenclature:

Aphelenchus modestus de Man, 1876

Notes: Jan Mayen (Steiner 1916a); Taymyr and Severnaya Zemlya, Russia (Gagarin 1996, Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Steiner 1916b).

Aphelenchoides robustus Gagarin, 1997*

Notes: Novaya Zemlya and Vaigach island, Russia (Gagarin 1997c, Gagarin 1997a, Gagarin 2001b).

Aphelenchoides saprophilus Franklin, 1957

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin 1986, Kuzmin and Gagarin 1990).

Aphelenchoides subtenuis (Cobb, 1926)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin 1972, Kuzmin and Gagarin 1990).

Family Tylenchidae

Aglenchus agricola (de Man, 1884)

Notes: Greenland (Brzeski 1999); Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 2001b).

Coslenchus costatus (de Man, 1921)

Nomenclature:

Tylenchus costatus de Man, 1921

Notes: Svalbard (Loof 1971); Greenland (Brzeski 1999); Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 2001b).

Basiria dolichura Loof, 1971*

Notes: Svalbard (Loof 1971).

Lelenchus leptosoma (de Man, 1880)

Nomenclature:

Tylenchus leptosoma de Man, 1880; *Anguillulina leptosoma* (de Man, 1880); *Filenchus leptosoma* (de Man, 1880)

Notes: Svalbard (Loof 1971); Jan Mayen (Allgén 1953); Taymyr and Severnaya Zemlya, Russia (Kuzmin 1986, Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Steiner 1916b).

Filenchus cylindricaudus (Wu, 1969)

Nomenclature:

Tylenchus cylindricaudus Wu, 1969*

Notes: Nunavut, Canada (Wu 1969b).

Filenchus cylindricus (Thorne & Malek, 1968)

Notes: Lena River estuary, Russia (Gagarin 2001b).

Filenchus discrepans (Andrássy, 1954)

Nomenclature:

Lelenchus discrepans Andrássy, 1954; *Ottolenchus discrepans* (Andrássy, 1954)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin 1986, Kuzmin and Gagarin 1990).

Filenchus ditissimus (Brzeski, 1963)

Nomenclature:

Tylenchus ditissimus Brzeski, 1963

Notes: Taymyr and Severnaya Zemlya, Russia (Gagarin and Kuzmin 1983, Kuzmin and Gagarin 1990).

Filenchus facultativus (Szczygiel, 1970)

Notes: Greenland (Brzeski 1999).

Filenchus filiformis (Bütschli, 1873)

Nomenclature:

species inquirenda; *Tylenchus filiformis* Bütschli, 1873; *Tylenchus* (*Filenchus*) *filiformis* Bütschli, 1873

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin 1972, Kuzmin 1976, Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Steiner 1916b).

Filenchus hamatus (Thorne & Malek, 1968)

Notes: Greenland (Brzeski 1999).

Filenchus hazanensis (Wu, 1969)

Nomenclature:

Tylenchus hazenensis Wu, 1969*; *Dactylotylenchus filiformis* Wu, 1969*

Notes: Nunavut, Canada (Wu 1969b, Wu 1969a).

Filenchus minutus (Cobb, 1893)

Nomenclature:

species inquirenda

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Filenchus misellus (Andrássy, 1958)

Notes: Greenland (Brzeski 1999).

Filenchus orbus Andrássy, 1954

Nomenclature:

Tylenchus aquilonius Wu, 1969*

Notes: Greenland (Brzeski 1999); Nunavut, Canada (Wu 1969b).

Filenchus quartus (Szczygiel, 1969)

Notes: Greenland (Brzeski 1999).

Filenchus thornei (Andrássy, 1954)

Nomenclature:

Tylenchus thornei Andrássy, 1954

Notes: Svalbard (Loof 1971); Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Malenchus acarayensis Andrássy, 1968

Notes: Lena River estuary, Russia (Gagarin 2001b); Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Malenchus bryophilus (Steiner, 1914)

Nomenclature:

Tylenchus bryophilus Steiner, 1914

Notes: Svalbard (Loof 1971); Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 2001b).

Malenchus exiguus (Massey, 1969)

Nomenclature:

Ottolenchus sulcis Wu, 1970*

Notes: Nunavut, Canada (Wu 1970).

Tylenchus davainei Bastian, 1865

Nomenclature:

Anguillulina davainei (Bastian, 1865); *Filenchus davainei* (Bastian, 1865)

Notes: Svalbard (Loof 1971); Jan Mayen (Allgén 1953); Greenland (Brzeski 1999, Ditlevsen 1927); Lena River estuary, Russia (Gagarin 2001b); Taymyr and Severnaya Zemlya, Russia (Gagarin and Kuzmin 1983, Kuzmin 1972, Kuzmin 1976, Kuzmin and Gagarin 1990); Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 2001b, Steiner 1916a).

Tylenchus neodavainei Wu, 1969*

Notes: Nunavut, Canada (Wu 1969b).

Tylenchus stylolineatus Wu, 1969*

Notes: Nunavut, Canada (Wu 1969b).

Family Dolichodoridae

Meiodorus hyalacus (Anderson & Ebsary, 1982)

Nomenclature:

Mulveyotus hyalacus Anderson & Ebsary, 1982*

Notes: Nunavut, Canada (Anderson and Ebsary 1982).

Geocenamus arcticus (Mulvey, 1969)

Nomenclature:

Tylenchorhynchus arcticus Mulvey, 1969*

Notes: Svalbard (Loof 1971); Nunavut, Canada (Mulvey 1969a); Taymyr and Severnaya Zemlya, Russia (Kuzmin 1986, Kuzmin and Gagarin 1990).

Geocenamus brevidens (Allen, 1955)

Nomenclature:

Merlinius brevidens (Allen, 1955)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Geocenamus circellus (Anderson & Ebsary, 1982)

Nomenclature:

Merlinius circellus Anderson & Ebsary, 1982*

Notes: Nunavut, Canada (Anderson and Ebsary 1982).

Geocenamus joctus (Thorne, 1949)

Nomenclature:

Tetylenchus joctus Thorne, 1949

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin 1986, Kuzmin and Gagarin 1990).

Geocenamus loofi (Siddiqi, 1979)

Nomenclature:

Tetylenchus joctus sensu Loof, 1971; *Merlinius loofi* Siddiqi, 1979

Notes: Svalbard (Loof 1971, Siddiqi 1979).

Geocenamus microdorus (Geraert, 1966)

Nomenclature:

Tylenchorhynchus microdorus Geraert, 1966

Notes: Svalbard (Loof 1971).

Geocenamus tetylus (Anderson & Ebsary, 1982)

Nomenclature:

Merlinius tetylus Anderson & Ebsary, 1982*

Notes: Nunavut, Canada (Anderson and Ebsary 1982).

Nagellus borealis Powers, Baldwin & Bell, 1983*

Notes: Alaska (Powers et al. 1983).

Nagellus grandis (Allen, 1955)

Nomenclature:

Tylenchorhynchus grandis Allen, 1955

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin 1972, Kuzmin and Gagarin 1990).

Nagelus leptus (Allen, 1955)

Nomenclature:

Tylenchorhynchus leptus Allen, 1955

Notes: Svalbard (Loof 1971); Greenland (Brzeski 1999); Nunavut, Canada (Mulvey 1969a); Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Nagellus lineatus (Allen, 1955)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Nagellus obscurus (Allen, 1955)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Nagellus parobscurus (Mulvey, 1969)

Nomenclature:

Tylenchorhynchus parobscurus Mulvey, 1969*

Notes: Nunavut, Canada (Mulvey 1969a).

Tylenchorhynchus dubius (Bütschli, 1873)

Nomenclature:

Bitylenchus dubius (Bütschli, 1873)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin 1972, Kuzmin 1976, Kuzmin and Gagarin 1990).

Tylenchorhynchus nanus Allen, 1955

Nomenclature:

Geocenamus nanus (Allen, 1955); *Merlinius nanus* (Allen, 1955)

Notes: Greenland (Brzeski 1999); Taymyr and Severnaya Zemlya, Russia (Kuzmin 1986, Kuzmin and Gagarin 1990).

Tylenchorhynchus cf. nothus Allen, 1955

Notes: Svalbard (Loof 1971).

Tylenchorhynchus parvus Allen, 1955

Nomenclature:

Bitylenchus parvus (Allen, 1955)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Family Hoplolaimidae

Rotylenchus brevicaudatus (Hopper, 1959)

Nomenclature:

Pararotylenchus brevicaudatus (Hopper, 1959)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Helicotylenchus platyurus Perry in Perry, Darling & Thorne, 1959

Notes: Greenland (Brzeski 1999).

Helicotylenchus spitsbergensis Loof, 1971*

Notes: Svalbard (Loof 1971); Greenland (Brzeski 1999).

Helicotylenchus varicaudatus Yuen, 1964

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin 1972, Kuzmin and Gagarin 1990).

Family Pratylenchidae

Pratylenchoides crenicauda Winslow, 1958

Notes: Svalbard (Loof 1971).

Pratylenchoides magnicauda (Thorne, 1935)

Nomenclature:

Tylenchorhynchus magnicauda (Thorne, 1935)

Notes: Svalbard (Loof 1971).

Pratylenchus pratensis (de Man, 1880)

Nomenclature:

Anguillulina pratense (de Man, 1880)

Notes: Jan Mayen (Allgén 1953).

Hirschmanniella gracilis (de Man, 1880)

Nomenclature:

Tylenchus gracilis Cobb (lapsus)

Notes: Svalbard (von Linstow 1900).

Hirschmanniella trimucronata Gagarin, 2000*

Notes: Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a, Gagarin 2000, Gagarin 2001b).

Family Criconematidae

Criconemoides annulatus Cobb in Taylor, 1936

Nomenclature:

Criconemoides hemispaericaudatus Wu, 1965*

Notes: Svalbard (Loof 1971); Nunavut, Canada (Wu 1965).

Family Tylenchulidae

Paratylenchus macrophallus (de Man, 1880)

Nomenclature:

species inquirenda; *Anguillulina macrophallum* (de Man, 1880)

Notes: Jan Mayen (Allgén 1953).

Paratylenchus cf. projectus Jenkins, 1956

Notes: Greenland (Brzeski 1999).

Family Anguinidae

Anguina agrostis (Steinbuch, 1799)

Notes: Nunavut, Canada (Mulvey 1963).

Subanguina askenasyi (Bütschli, 1873)

Nomenclature:

Ditylenchus askenasyi (Bütschli, 1873)

Notes: Taymyr and Severnaya Zemlya, Russia (Gagarin 2001b).

Ditylenchus acutatus Brzeski, 1991

Notes: Greenland (Brzeski 1999).

Ditylenchus dryadis Anderson & Mulvey, 1980*

Notes: Nunavut, Canada (Anderson and Mulvey 1980).

Ditylenchus equalis Heyns, 1964

Notes: Greenland (Brzeski 1999).

Ditylenchus intermedius (de Man, 1880)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin 1972, Kuzmin and Gagarin 1990).

Nothotylenchus acris Thorne, 1941

Notes: Nunavut, Canada (Mulvey 1969b); Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Nothotylenchus acutus Khan, 1965

Notes: Nunavut, Canada (Mulvey 1969b).

Nothotylenchus attenuatus Mulvey, 1969*

Notes: Nunavut, Canada (Mulvey 1969b).

Nothotylenchus cf. danubialis Andrássy, 1960

Notes: Nunavut, Canada (Mulvey 1969b).

Family Neotylenchidae

Deladenus durus (Cobb, 1922)

Notes: Nunavut, Canada (Das 1964).

Hadrodenus megacondylus Mulvey, 1969*

Notes: Nunavut, Canada (Mulvey 1969b).

Hexatylus mulveyi Das, 1964*

Notes: Nunavut, Canada (Das 1964).

Prothallonema mucronatum (Thorne & Malek, 1968)

Nomenclature:

Stictylus mucronatus Thorne & Malek, 1968

Notes: Greenland (Brzeski 1999); Nunavut, Canada (Mulvey 1969b).

Family Bunonematidae

Bunonema hessi Steiner, 1914

Notes: Novaya Zemlya and Vaigach island, Russia (Steiner 1916b).

Bunonema reticulatum Richters, 1905

Notes: Svalbard (Loof 1971).

Family Diplogastridae

Diplogaster rivalis (Leydig, 1854)

Notes: Lena River estuary, Russia (Gagarin 2001b).

Goffartia variabilis (Micoletzky, 1922)

Notes: Taymyr and Severnaya Zemlya, Russia (Gagarin 1990, Gagarin 2001b, Gagarin 2001a, Gagarin 2008).

Fictor fictor (Bastian, 1865)

Notes: Taymyr and Severnaya Zemlya, Russia (Kuzmin and Gagarin 1990).

Fictor shoshini Gagarin, 1995*

Notes: Lena River estuary, Russia (Gagarin 1995, Gagarin 2001b); Novaya Zemlya and Vaigach island, Russia (Gagarin 1997a).

Koerneria angarensis (Gagarin, 1983)

Nomenclature:

Fictor angarensis (Gagarin, 1983)

Notes: Lena River estuary, Russia (Gagarin 2001b); Taymyr and Severnaya Zemlya, Russia (Gagarin 1990, Gagarin 2001b, Gagarin 2001a).

Koerneria ruricola (Gagarin, 1983)

Nomenclature:

Fictor ruricola (Gagarin, 1983)

Notes: Taymyr and Severnaya Zemlya, Russia (Gagarin 2001b).

Mononchoides intermedius Gagarin, 1993

Notes: Taymyr and Severnaya Zemlya, Russia (Gagarin 1996, Gagarin 2001b).

Family Rhabditidae

Choriorhabditis gracilicauda (de Man, 1876)

Nomenclature:

Rhabditis gracilicauda de Man, 1876

Notes: Jan Mayen (Allgén 1953).

Choriorhabditis producta (Schneider, 1866)

Nomenclature:

Anguillulina intermedia (de Man, 1880)

Notes: Jan Mayen (Allgén 1953).

Rhabditis terricola Dujardin, 1844

Nomenclature:

Rhabditis aspera Bütschli, 1873

Notes: Jan Mayen (Allgén 1953).

Aphelenchus nivalis Aurivillius, 1883*

Notes: Inquirenda et incertae sedis. Svalbard (Aurivillius 1883).

Macfadyenia filicaudata Allgén, 1953*

Notes: Inquirenda et incertae sedis. Jan Mayen (Allgén 1953).

Parachromagasteriella arctica Allgén, 1953*

Notes: Inquirenda et incertae sedis. Jan Mayen (Allgén 1953).

Plectus cirratus f. *parietinus sf. latilaimus* Allgén, 1953*

Notes: Inquirenda et incertae sedis. Jan Mayen (Allgén 1953).

Prodomorganus tajmiris Gagarin, 1993*

Notes: Inquirenda et incertae sedis. Taymyr and Severnaya Zemlya, Russia (Gagarin 1990, Gagarin 1993, Gagarin 2001b).

Teratocephalus micrurus Rahm, 1924

Notes: Inquirenda et incertae sedis. Taymyr and Severnaya Zemlya, Russia (Kuzmin 1972, Kuzmin and Gagarin 1990).

Tylenchus macrospiculatus Gagarin, 1997

Notes: Nomen nudum. Novaya Zemlia and Vaigach island, Russia (Gagarin 1997a).

Discussion

Despite of more than 130 years of research, our knowledge on the diversity and distribution of Arctic nematodes is still very incomplete and limited to only few relatively small areas of the region. The first studies of Arctic nematodes date back to 1883, when the first nematode was described from Spitzbergen (Aurivillius 1883). The taxonomic position of the species *Aphelenchus nivalis* Aurivillius, 1883 remains uncertain and its type material can not be located for re-study. After Aurivillius, the nematode fauna of Svalbard archipelago was studied by von Linstow (1900), Menzel (1920), Boström (1987a), Boström (1987b), Boström (1989), Zell (1993) and to a lesser extent by Brzeski (1962), Siddiqi (1979), Janiec (1997), Klekowski and Opalinski (1986), Klekowski and Opalinski (1990), Klekowski and Opalinski (1992), Opalinski and Klekowski (1992), Holovachov et al. (2003) adding up to the list of 101 species. Most of the sampling on Svalbard was concentrated around the west part of the Spitsbergen island and a large part of the archipelago remains unstudied. From other territories belonging to the Kingdom of Norway, 43 species of nematodes were found on the small island of Jan Mayen (Allgén 1953, Steiner 1916a), while no information is available for the northernmost part of the Finnmark.

Most of the nematological research in the Iceland was focused in southern and western part of the island (De Coninck 1940, De Coninck 1943, De Coninck 1944), which is considered as Subarctic in the current publication. Sampling sites from the northern part of the country were also outside the boundary considered in the present paper (Kreis 1963, Starmühlner 1969). A small part of the Arctic of the Iceland has not been studied to any considerable extent – only six species from the genus *Plectus* are listed from the areas near Húsavík and Tjörnes by Zell (1993). Terrestrial nematode fauna of Greenland, on the other hand, received considerable attention from Ditlevsen (1927), Allgén (1954), Zell (1993), Brzeski (1999), who altogether reported 43 species of nematodes collected in several distant localities along the eastern (Little Pendulum Island and Angmagssalik) and western (Disko island, Kangerlussuaq, Kapisillit, Sukkertoppen and Upernavik) sides of the island.

Nematode fauna of the Arctic regions of Canada is studied comparatively better. The research was focused in several localities in the Nunavut province including Bathhurst, Ellef Ringnes, Ellesmere and Somerset islands (Anderson 1966, Anderson 1969, Anderson and Ebsary 1982, Anderson and Mulvey 1980, Das 1964, Ebsary 1984, Ebsary 1985, Elshishka et al. 2013, Mulvey 1963, Mulvey 1967b, Mulvey 1967a, Mulvey 1969c, Mulvey 1969a, Mulvey 1969b, Mulvey 1978, Sanwal 1965, Sanwal 1968, Wu 1965, Wu 1969b, Wu 1969a, Wu 1970, Zell 1993), and in the small area of the Mackenzie River delta and Tuktoyaktok in the Northwest territories (Ebsary 1982, Eveleigh 1982, Mulvey 1978, Mulvey and Anderson 1979). Respectively, 55 and 13 species were described from these regions between 1963 and 1993. Much less is known about the nematodes from the Arctic regions of Alaska – only 22 species were recorded there by Andrássy (2003a), Andrássy (2003b), Andrássy (2003c), Bernard (1992), Powers et al. (1983). Studied localities include Prudhoie Bay and neighbouring North Slope and Brooks Range, as well as localities along Kobuk River near Noorvik and Unalakleet River near Unalakleet.

Fauna of the Russian part of the Arctic lists the largest number of nematode species, including many typical freshwater nematodes, but known from only three distinct geographic regions: Novaya Zemlya archipelago together with Vaygach island, Taymyr peninsula together with Severnaya Zemlya, and the Lena River estuary. So far, only 37 species of freshwater nematodes are know from the Lena River estuary (Gagarin 1995, Gagarin 1999b, Gagarin 2000, Gagarin 2001b). The list of nematodes from the Novaya Zemlya archipelago and Vaygach island includes 81 nematode species, both terrestrial (Steiner 1916b) and freshwater (Gagarin 1997c, Gagarin 1997b, Gagarin 1997a, Gagarin 1999a, Gagarin 2000, Gagarin 2001c, Gagarin 2001b). Arctic areas of the Taymyr peninsula and Severnaya Zemlya are the most intensively studied part of the Arctic with localities including the Taymyr Lake, Enisei River, Putorana Plateau, Cape Chelyuskin – 229 species of freshwater and terrestrial nematodes were reported from different sampling sites of this region over the past 40 years (Elshishka et al. 2012, Elshishka et al. 2013, Gagarin 1990, Gagarin 1991a, Gagarin 1991b, Gagarin 1993, Gagarin 1996, Gagarin 1999a, Gagarin 2001b, Gagarin 2001a, Gagarin 2008, Gagarin 2009, Gagarin and Kuzmin 1972, Gagarin and Kuzmin 1983, Kuzmin 1972, Kuzmin 1976, Kuzmin 1986, Kuzmin and Gagarin 1990).

In summary, 391 species, belonging to 146 genera, 54 families, and 10 orders of the phylum Nematoda are known from the entire Arctic (including species of dubious taxonomic status, but exclusing single nomen nudum). Even taking into consideration relatively low variety of habitats in this region, comparing to other areas of the world, as well as the rather harsh environmental conditions, this list is considered to be very incomplete and preliminary.

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